### CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

ORDER NO.	
NPDES NO.	CA0085162

WASTE DISCHARGE REQUIREMENTS AND WATER RECYCLING REQUIREMENTS FOR

GRIZZLY RANCH COMMUNITY SERVICES DISTRICT
WASTEWATER COLLECTION, TREATMENT, AND RECYCLING FACILITY
PLUMAS COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Regional Board) finds that:

#### REPORT OF WASTE DISCHARGE

- 1. The Grizzly Ranch Community Services District (GRCSD, hereafter referred to as Discharger), submitted a Report of Waste Discharge (ROWD) on 18 June 2003, and applied for a permit to discharge treated wastewater (effluent) to Big Grizzly Creek, a water of the United States, under the National Pollutant Discharge Elimination System (NPDES). The ROWD also requests recycling requirements to produce recycled water for irrigation at the golf course in the development. The ROWD was initially deemed incomplete on 17 July 2003 due to the absence of the proper United States Environmental Protection Agency (USEPA) forms and lack of receiving water (Big Grizzly Creek) characterization. On 5 September 2003, the Discharger submitted additional information that completed the ROWD.
- 2. The GRCSD was formed in November 2003 to oversee the operation, maintenance, and monitoring of the wastewater collection, treatment, disposal, and recycled water production system for the Grizzly Ranch development, among other duties. The GRCSD is a public entity in accordance with Section 53090 et seq. of the California Government Code, and is therefore vested with all the powers necessary to collect funds to perform the necessary operation, maintenance, and monitoring to comply with this Order.

### WASTEWATER COLLECTION, TREATMENT, AND RECYCLED WATER SYSTEM DESCRIPTION AND GENERAL SITE INFORMATION

3. The Discharger will own and operate a sewer system, and wastewater treatment plant (the sewer system and plant shall be referred to as "Facility"). The Discharger will provide sewer service to domestic and commercial users within the GRCSD's jurisdiction. The Grizzly Ranch development will consist of 380 single-family homes, an 18-hole golf course, a golf clubhouse, and some limited commercial facilities such as small stores, shops, and offices. The average annual monthly wastewater flow from the development will be 61,000 gallons per day (gpd), and

the design flow will be 81,000 gpd. Wastewater flow from each component of the development is estimated as follows (design flow):

<b>Development Component</b>	Design Flow (gallons per day)	
Single-family Housing	76,000	
Commercial	1,000	
Clubhouse	4,000	
TOTAL	81,000	

- 4. The development is in Sections 15, 16, 17, 20, 21, and 22, T23N, R14E, MDB&M, as shown in Attachment A, a part of this Order. The Discharger owns the wastewater treatment plant property (AP No. 028-020-004). The golf course, on which recycled water application will take place, consists of parcels 028-010-006, 028-010-031, 028-010-036, and 0280-010-037, which are owned by Grizzly Creek Golf, LLC. Separate water reclamation requirements will be issued to Grizzly Creek Golf, LLC for the use and management of the recycled water on the golf course. The Facility and discharge (including stream discharge and recycling area) lie within the Sloat Hydrologic Unit No. 518.33, as depicted on interagency hydrologic maps prepared by the State of California Department of Water Resources (DWR) in August 1986.
- 5. The Facility will consist of:
  - a. A headworks with flow metering and a rotary drum screen for grit and large solids removal;
  - b. A sequencing batch reactor for waste strength reduction and nitrogen removal;
  - c. Multi-media filters for additional removal of biochemical oxygen demand (BOD), total suspended solids (TSS), and turbidity, prior to disinfection;
  - d. An emergency storage pond (Emergency Pond);
  - e. An irrigation storage pond (Irrigation Pond) and irrigation system;
  - f. An outfall diffuser in Big Grizzly Creek;
  - g. A pumping station and irrigation distribution piping for recycled water irrigation.

Refer to the Information Sheet for additional details on the treatment process.

- 6. When dilution of effluent is 100:1 or greater, effluent discharge to Big Grizzly Creek is permitted at the point latitude 39°48'15" North and longitude 120°29'29" West. When this dilution cannot be maintained, and from 16 May to 15 November, reuse of the treated effluent (recycled water) for golf course irrigation is practiced; discharge to Big Grizzly Creek is then prohibited, with some exceptions.
- 7. According to the Discharger, until average monthly flow to the Facility reaches the amount produced by 30 homes (approximately 6,000 gallons per day), the Facility cannot be efficiently

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operated. Until such time the Discharger will haul wastewater from the Facility to a permitted receiving facility or wastewater treatment plant, and forgo start-up of the wastewater treatment Plant. This Order requires the Discharger to provide records of wastewater hauling and to perform wastewater pumping and hauling in a sanitary manner by licensed personnel.

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- 8. Big Grizzly Creek is tributary to the Middle Fork of the Feather River; creek flow is controlled by the outlet structure of Grizzly Valley Dam, which impounds Lake Davis. Grizzly Valley Dam is managed and operated by DWR, which constructed the dam in 1966 as part of the State Water Project.
- 9. By a memorandum of agreement between the California Department of Fish and Game (DFG) and DWR, as delineated in Water Rights Decisions 15254 and 15255, releases from Grizzly Valley Dam must be greater than or equal to 10 cubic feet per second (cfs), with some exceptions. This minimum 10 cfs release is necessary to protect the fishery resource in Big Grizzly Creek. An exception to the minimum release is allowed for five consecutive days during which release can be reduced to five cfs, generally for fish counts by DFG.
- 10. There are currently two water rights on Big Grizzly Creek. One, the Ramelli water right, for up to five and one half cfs, to a maximum of 700 acre feet per year (there is also an option in the water right agreement for an additional 100 acre feet in a given year, but the 100 acre feet must be returned the next year, reducing the subsequent year's allotment to 600 acre feet) held by the United States Department of the Interior, Forest Service (USFS). The second water right, for up to one and one half cfs, the Val Verde water right, is held by the Sierra Health Foundation. The withdrawal point for the Ramelli water right is upstream of the Facility discharge to Big Grizzly Creek, and for the Val Verde water right, downstream of the discharge.
- 11. The Ramelli water right is currently used for flood irrigation of pasture. Historically, exercise of this right was utilized by withdrawing water from Big Grizzly Creek for two continuous weeks at a time, followed by approximately a week or more with no withdrawal. For the last several years, the water right has been exercised continuously at an approximately equal withdrawal rate throughout the season, from mid May to mid October. Continuous exercise of the water right reduces the withdrawal rate to approximately 2.7 cfs to assure the maximum annual allotment of 800 acre feet is not exceeded. Although not part of the release agreement, reductions of releases to five cfs are timed to occur in September and to coincide with periods when the Ramelli water right is not being exercised. This Order prohibits direct discharge of effluent to Big Grizzly Creek prior to 15 November. Therefore, during discharge of Facility effluent to the receiving water minimum flow in Big Grizzly Creek: 1) should never be less than 4.5 cfs (even assuming full diversion of the Ramelli water right in November-an extremely unlikely occurrence); 2) will seldom be less than 7.3 cfs (assuming the Ramelli water right will be used in November); and 3) will almost always be 10 cfs or more.
- 12. Lake Davis contains a large population of illegally introduced Northern Pike (Pike), a voracious predator fish. Pike are damaging to the local trout fishery in Lake Davis and potentially to fisheries in San Francisco Bay and the Sacramento/San Joaquin Delta, if the Pike were to escape

Lake Davis. DFG has been attempting to eradicate the Pike for many years. In 1998 Lake Davis was treated with rotenone. Although the treatment at first appeared successful, Pike have reappeared and continue to multiply. Currently, one potential Pike management plan entails partially draining the lake prior to treatment by rotenone, or other means. DFG staff indicates that if the proposed partial draining of the lake occurs, the minimum 10 cfs water release can be maintained, unless several years of severe drought were to occur soon after lake draining.

- 13. The ROWD describes the expected Facility effluent characteristics as follows:
  - a. Monthly Average (dry weather) Flow: 0.061 million gallons per day (mgd)
  - b. Daily Peak Wet Weather Flow: 0.12 mgd
  - c. Design Flow (dry weather): 0.081 mgd

<u>Constituent</u>	mg/L	<u>lb/day</u>
BOD <sup>1</sup>	10	$6.75^2$
Total Suspended Solids	10	$6.75^2$
Total Nitrogen	10	$6.75^2$
Total Coliform	<2.2 (MPN/100 mL)	NA

<sup>&</sup>lt;sup>1</sup>5-day, 20°C biochemical oxygen demand

- 14. A schematic of the proposed Facility is shown in Attachment B, a part of this Order.
- 15. Soil conditions beneath the Irrigation and Emergency ponds are ill defined. However, as indicated, the Irrigation Pond will have a synthetic liner, and in general will receive only a small portion of treated wastewater. The Emergency Pond will also be lined, and will contain wastewater only for the time necessary to process by-passed, improperly treated, wastewater back through the Facility after a process upset. In addition, this Order calls for a liner inspection procedure to assure that the Emergency Pond liner maintains its integrity and is substantially free of leaks. Inspection will necessitate draining, so auxiliary emergency storage will have to be provided during inspection, or the Emergency Pond will have to be designed with multiple cells.
- 16. All areas of the Facility that present a potential human health threat or could be sensitive to vandalism will be fenced.
- 17. The Facility lies outside of the boundaries of the 100-year flood plain according to Federal Emergency Management Administration (FEMA) maps for the area.
- 18. Average annual precipitation at the Facility, which falls as a combination of rain and snow, is 24.6 inches as given by DWR weather station information for the area. The 100-year return frequency rainfall season precipitation is approximately 46 inches. Average annual evaporation in the area is 35.3 inches.

<sup>&</sup>lt;sup>2</sup>Based on the design flow of 0.81 mgd

19. The sewer system is consists entirely of low pressure pipeline. Each home, as well as all other wastewater dischargers, will be equipped with a small storage vault (approximately 30 gallons for residences), and a grinder pump. The grinder pump will deliver wastewater to the sewer system. Pumping will be controlled by level in the storage vault. The GRCSD will be responsible for operation and maintenance of these pump vaults, and before they can obtain a building permit all property owners must sign a licensing agreement with the GRCSD to allow the GRCSD access to the pumps.

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- 20. All sewer systems experience some infiltration and inflow (I/I), which is groundwater and surface water that enters a sewer system. This Order requires leak testing of the sewer system prior to any discharge of wastewater to the Facility. This Order also requires submission of testing results to Regional Board staff, and a certification that the collection, treatment, and disposal systems have been constructed in substantial conformance with the plans and specifications. The testing and certification must be performed by a registered California civil engineer. The provisions of this Order also require a Sanitary Sewer System Overflow and Prevention Plan and an I/I Identification and Reduction Program.
- 21. Groundwater depth in the vicinity of the Facility during the winter is unknown. However, there are many springs on the property; groundwater is therefore expected to be shallow.
- 22. The Discharger will operate one or more wells as part of a community potable water supply for the project. The water supply may have high arsenic concentrations, and the Discharger will treat the water with an adsorbent media prior to distribution. The media must be backwashed periodically to minimize water treatment system pressure loss. Backwashing does not desorb arsenic; the effluent arsenic concentration during backwash is generally lower than the influent due to system adsorption of arsenic from the backwash water (the raw water supply will be used for backwash). Backwash water will be discharged to the Irrigation Pond. This Order requires the Discharger to monitor the backwash water to assure excessive arsenic is not being discharged.
- 23. The Discharger will maintain a small fuel storage tank (120 gallons) at the Facility for emergency operation of a generator in case of a power outage. The fuel tank will provide a 12-hour supply to the generator for operation of the wastewater treatment plant.
- 24. The USEPA and the Regional Board have classified this discharge as a minor discharge.

### WATER QUALITY CONTROL PLAN, NATIONAL TOXICS RULE, AND CALIFORNIA TOXICS RULE

25. The Regional Board adopted a Water Quality Control Plan, Fourth Edition, for the Sacramento River Basin and the San Joaquin River Basin (hereafter Basin Plan), which designates beneficial uses, establishes water quality objectives for those beneficial uses, and establishes implementation programs and policies to achieve water quality objectives for all waters of the Basin. These requirements implement the Basin Plan.

26. The USEPA adopted the *National Toxics Rule* (NTR) on 5 February 1993 and the *California Toxics Rule* (CTR) on 18 May 2000. These Rules contain water quality standards applicable to this discharge for priority pollutants. These priority pollutants are listed in Attachment C, which is part of this Order. The State Water Resources Control Board SWRCB adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (known as the State Implementation Policy or SIP) that contains guidance on implementation of the NTR and the CTR.

#### BENEFICIAL USES OF THE RECEIVING WATER

- 27. The Basin Plan on page II-2.00 states: "Existing and potential beneficial uses which currently apply to surface waters of the basins are presented in Figure II-1 and Table II-1. The beneficial uses of any specifically identified water body generally apply to its tributary streams."
- 28. The Basin Plan does not specifically identify any beneficial uses for Big Grizzly Creek and its tributaries. However, the Basin Plan does identify present and potential beneficial uses for the Middle Fork of the Feather River, to which Big Grizzly Creek is directly tributary, which include: municipal and domestic supply (MUN); water contact recreation and canoeing and rafting (REC-1); non-contact recreation (REC-2); cold freshwater habitat (COLD); warm fresh water habitat (WARM) cold water spawning, reproduction, and/or early development (SPWN); and wildlife habitat (WILD). Refer to the Information Sheet for the rationale for assigning these beneficial uses to Big Grizzly Creek.
- 29. The beneficial uses of groundwater are municipal and domestic water supply, agricultural supply, industrial service supply, and industrial process supply.

#### WATER RECYCLING CRITERIA

- 31. The SWRCB adopted Resolution No. 77-1 titled, *Policy With Respect to Water Reclamation in California* on 6 January 1977. This policy requires the Regional Board to encourage water recycling and reuse in water-short areas of the state. If recycled water is not used to replace potable water uses to the maximum extent practicable, the Regional Board Basin Plan, at IV-14.00, requires a justification for this lack of recycling.
- 32. In 1996 the SWRCB and the California Department of Health Services (DHS) set forth principles, procedures, and agreements to which the agencies committed themselves, relative to the use of recycled water in California, in the document *Memorandum of Agreement Between the Department of Health Services and The State Water Resources Control Board On Use of Reclaimed Water* (the MOA). This Order is consistent with the MOA.
- 33. These requirements are consistent with and implement the California Code of Regulations, Title 22, Division 4, Chapter 3 (Title 22). When the effluent is being applied to the golf course, and application is not restricted (e.g. the recycled water can be applied at any time of the day, including those times that golfers are present), Title 22 requires that:

- a. The wastewater be oxidized, which requires that its organic matter is stabilized, nonputrescible, and contains dissolved oxygen (§60301.650);
- b. The wastewater be filtered, which requires that it be coagulated and passed through a specified filter media, and that it meets specific effluent turbidity criteria (§60301.320);
- c. For a chlorine disinfection process, the product of total chlorine residual and modal contact time (CT) be a minimum of 450 mg-minutes per liter and the contact time be a minimum of 90 minutes (§60301.230(a)(1));
- d. The median count of total coliform bacteria measured in the disinfected effluent not exceed 2.2 MPN /100 mL utilizing the bacteriological results of the last seven days for which analyses have been completed (§60301.650(2)(b));
- e. The count of total coliform bacteria measured in the disinfected effluent does not exceed 23 MPN/100 mL in more than one sample in any 30 day period (§60301.650(2)(b)), and;
- f. The count of total coliform bacteria measured in the disinfected effluent never exceeds 240 MPN/100 mL (§60301.650(2)(b)).

This Order requires daily testing of the disinfected wastewater for coliform is required during golf course irrigation in accordance with Title 22.

- 34. Title 22 requires that the Discharger submit an Engineering Report to DHS for their review prior to implementing a water recycling project. The Discharger has provided an engineering report to DHS and the Regional Board. This Order prohibits the discharge of wastewater from the Facility until DHS has indicated their complete satisfaction with the Engineering Report.
- 35. The Regional Board has consulted with the DHS and the Plumas County Environmental Health Department, and has considered their recommendations regarding the public health aspects of the recycled water project.

#### EFFLUENT LIMITATIONS AND REASONABLE POTENTIAL

- 36. Effluent limitations, and toxic and pretreatment effluent standards established pursuant to Sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 304 (Information Guidelines), and 307 (Toxic Pretreatment Effluent Standards) of the Clean Water Act (CWA), and amendments thereto, are applicable to the discharge.
- 37. Federal regulations contained in 40 CFR Part 122.44 (d) require effluent limitations for all pollutants that are or may be discharged at a level that will cause or have the reasonable potential to cause or contribute to an in-stream excursion above a narrative or numerical water quality standard (reasonable potential). A Basin Plan standard is defined as the beneficial use and the water quality objective that protects the beneficial use. The SIP provides the method for determining reasonable potential for priority pollutants defined in the NTR and CTR. Determining reasonable potential for pollutants other than those contained in the CTR and NTR is accomplished by analyzing Facility operations, past effluent monitoring results, and other

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pertinent factors. In addition, the USEPA has provided guidance for the analysis of reasonable potential in their *Technical Support Document* for *Water Quality Based Toxics Control (TSD)*(EPA/505/2-90-101), which has been considered in this permit for developing effluent limitations for pollutants other than those in the CTR and NTR. For the determination of reasonable potential the TSD allows consideration of a mixing zone (a zone surrounding the area of receiving water discharge where water quality objectives may not be met prior to adequate dilution of effluent).

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- 38. The 1Q10 flow for a stream is defined as the statistical value that represents a one-day low flow value that has a recurrence frequency of 10 years. The 7Q10 flow is defined as the statistical value that represents the 7-day average low flow that has a recurrence frequency of 10 years. In developing effluent limitations, the Basin Plan and the SIP allow for the usage of dilution credits (depending on the potential impact of a mixing zone to aquatic species that may move through the zone) at the point of effluent discharge to the receiving water. The 1Q10 and 7Q10 flows are used in establishing appropriate dilution credits for non-carcinogens. The harmonic mean stream flow is used when establishing effluent limitations for carcinogens.
- 39. As indicated in the above findings, the minimum flow in Big Grizzly Creek at the Facility outfall should never be less than 4.5 cfs for more than a 5 day period because of the requirement in the water rights decisions regarding Big Grizzly Creek. Therefore, the 1Q10 and 7Q10 flows in Big Grizzly Creek are assumed equal to this minimum flow of 4.5 cfs.
- 40. The SIP establishes expected minimum levels (MLs) for detection of each of the priority pollutants in the NTR and CTR. Water quality criteria have been established for forty-three of the volatile and semi-volatile organic priority pollutants, including pesticides, at concentrations less than current laboratory MLs. Based on proposed Facility operations and the nature of the waste treated, these compounds are not likely to be present in concentrations in the Facility effluent that cause or contribute to violations of water quality objectives. This Order requires monitoring to assure that the basis of this finding remains unchanged. If and when method levels for these compounds become more sensitive, or additional data or information warrants, this permit may be reopened to establish effluent limitations for those compounds determined to have a reasonable potential in accordance with the Provisions of this Order.
- 41. Receiving water sampling of Big Grizzly Creek produced the following results for priority pollutants (because of the limited time the discharge had available prior to submittal of their report of waste discharge, one sample for the "receiving water," was obtained from Lake Davis, as it is the only source of flow in Big Grizzly Creek). Only those pollutants detected in the testing are shown in the table.

<u>Pollutant</u>	Highest Measured Concentration, (ug/L) <sup>1</sup>	Most stringent water quality criterion, (ug/L) <sup>2</sup>
Chromium(VI)	0.2	11
Copper	1.2	3.4
Lead	0.18	0.72
Nickel	0.5	19.4
Zinc	7	44
2-ethylchlorovinyl Ether	0.4	NA
1.2-Dichloroethane	0.2	0.38
Toluene	1.5	6800

For metal pollutants, the value is measured by the laboratory as the total recoverable metal fraction.

- 43. At a hardness of 31 mg/L in Big Grizzly Creek (water quality criteria for metals vary with water hardness; 31 mg/L was the lowest hardness detected, and results in the most conservative criteria), none of the above detected pollutant concentrations indicate a potential for exceedance of a water quality objective in accordance with the SIP. Whether concentrations of any priority pollutant in Facility effluent result in a finding of reasonable potential cannot be determined until the Facility begins operation. Many treatment plants in Plumas County, and other areas, have encountered elevated metal concentrations in their discharge, especially copper and lead. One potential source of copper and lead is household copper water piping with lead solder joints. However, these other plants do not produce an effluent with the low concentration of BOD and solids that will be required of the Discharger; lower effluent solids concentrations generally correlate with lower metals concentrations. In addition, plumbing for this development will consist of plastic or low-lead soldered copper. Therefore, there may be no finding of reasonable potential for any priority pollutant discharged in the Facility effluent. This Order includes a reopener to establish effluent limitations for priority pollutants if monitoring demonstrates that there is a reasonable potential for any priority pollutant.
- 44. These requirements prohibit the direct discharge of effluent to Big Grizzly Creek between 16 May and 15 November. Exceptions to this prohibition may be granted by the Executive Officer during emergency circumstances, if the Discharger has previously undertaken a program of adequate maintenance, flow reduction, improved disinfection, and toxicity reduction (See General Provision I.9.).
- 45. This Order contains provisions and monitoring program requirements that require the Discharger to conduct additional sampling to provide information on all priority pollutants in the discharge.
- 46. Section 13263.6(a), CWC, requires that "the regional board shall prescribe effluent limitations as part of the waste discharge requirements of a POTW [Publicly Owned Treatment Works] for all substances that the most recent toxic chemical release data reported to the state emergency response commission pursuant to Section 313 of the Emergency Planning and Community Right to Know Act of 1986 (42 U.S.C. Sec. 11023) (EPCRKA) indicate as discharged into the POTW,

<sup>&</sup>lt;sup>2</sup> For metal pollutants, the CTR dissolved criterion has been converted to a total recoverable value for comparison to the laboratory results.

for which the state board or the regional board has established numeric water quality objectives, and has determined that the discharge is or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to, an excursion above any numeric water quality objective." As this Order regulates a new facility with no previous discharge, the information relevant to comply with this finding is unavailable. This Order contains a reopener to establish effluent limitations for any compound that meets the criterion of EPCRKA.

## COMPLIANCE WITH STATE AND FEDERAL POLICIES REGARDING WATER QUALITY DEGRADATION

48. The permitted discharge is consistent with the anti-degradation provisions of 40 CFR Part 131.12 and with SWRCB Resolution 68-16 (Policy with Respect to Maintaining High Quality Water of Waters in California). Compliance with these requirements will result in the use of best practicable treatment or control of the discharge. The impact on existing water quality will be insignificant.

#### SEWER SYSTEM OVERFLOW PREVENTION

- 49. The Discharger's sanitary sewer system collects wastewater using pressure piping, pumps, and/or other conveyance systems and directs this wastewater to the Facility. A "sanitary sewer overflow" is defined as a discharge to ground or surface water from the sanitary sewer system at any point upstream of a wastewater treatment plant. Temporary storage and conveyance facilities (such as wet wells, regulated impoundments, tanks, highlines, etc.) may be part of a sanitary sewer system; discharges to these facilities are not considered sanitary sewer overflows provided that the waste is fully contained within these temporary storage/conveyance facilities.
- 50. The potential causes of sanitary sewer overflows that may affect this sewer system include grease blockages, root blockages, debris blockages, air relief/vacuum valve failures, vandalism, storm or groundwater inflow/infiltration, snow melt infiltration, lift station pump failure or blockage, and lack of capacity, both hydraulic capacity of the sewer and pumping station capacity. Sanitary sewer overflows pose a threat to public health, may adversely affect aquatic life, and may impair the recreational use and aesthetic enjoyment of surface waters in the area.
- 51. Adequate steps must be taken to maintain and operate the sewer system and prevent sewer system overflows. This Order requires the Discharger to prepare and implement a Sewer System Operation, Maintenance, Overflow Prevention, and Overflow Response Plan, and an I/I Identification and Reduction Plan.

#### MANAGEMENT OF STORMWATER

52. The USEPA, on 16 November 1990, promulgated storm water regulations (40 CFR Parts 122, 123, and 124) that require specific categories of industrial facilities which discharge storm water to obtain NPDES permits and to implement Best Available Technology Economically

Achievable and Best Conventional Pollutant Control Technology to reduce or eliminate industrial storm water pollution.

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53. On 17 April 1997, the SWRCB adopted Order No. 97-03-DWQ (General Permit No. CAS000001), specifying waste discharge requirements for discharge of storm water associated with industrial activities, excluding construction activities, and requiring submittal of a Notice of Intent by industries covered under the permit. This municipal discharge is less than 1.0 MGD and the Discharger is not required to obtain a permit for storm water.

### COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, PERMIT NOTIFICATION REQUIREMENTS, AND MISCELLANEOUS

- 54. Section 13267 of the California Water Code states, in part, "(a) A regional board, in establishing...waste discharge requirements... may investigate the quality of any waters of the state within its region" and "(b) (1) In conducting an investigation..., the regional board may require that any person who... discharges... waste...that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports." The attached Monitoring and Reporting Program is issued pursuant to California Water Code Section 13267. The monitoring and reporting program required by this Order is necessary to assure compliance with these waste discharge requirements. The Discharger is responsible for the discharges of waste at the Facility subject to this Order.
- 55. The action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000, et seq.), in accordance with Section 13389 of the CWC. However, the Discharger has submitted an Environmental Impact Report to Plumas County. The Environmental Impact Report was certified by Plumas County on 6 March 1990.
- 56. The Regional Board has considered the information in the attached Information Sheet in developing the findings of the Order. The attached Information Sheet, Monitoring and Reporting Program No.\_\_\_\_\_, and Attachments A through D are part of this Order.
- 57. The Regional Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
- 58. The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge.

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59. This Order shall serve as an NPDES permit pursuant to Section 402 of the CWA, and amendments thereto, and shall take effect upon the date of hearing, provided the USEPA has no objections.

IT IS HEREBY ORDERED that the Grizzly Ranch Community Services District, its agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted thereunder, shall comply with the following:

#### A. Discharge Prohibitions

- 1. The discharge of effluent at a location or in a manner different from that described in the Findings is prohibited.
- 2. Discharge from the Facility to the golf course is prohibited prior to final approval of the Title 22 Engineering Report by the Department of Health Services Division of Drinking Water.
- 3. Discharge to Big Grizzly Creek is prohibited from **16 May to 15 November** except as provided for in General Provision I.9.
- 4. Discharge to Big Grizzly Creek is prohibited when dilution of effluent is less than 100:1 based upon a running twenty four-hour average of both effluent discharge and flow in Big Grizzly Creek except as provided for in General Provision I.9.
- 5. The by-pass or overflow of wastes, except as allowed by Standard Provisions and Reporting Requirements for Waste Discharge Requirements item A.13 (NPDES, February 2004), is prohibited.
- 8. Discharge of backwash water exceeding 10 ug/L total arsenic to the Irrigation Pond is prohibited.
- 9. Discharge of materials, other than storm water, that are not otherwise permitted by this Order to surface waters or surface water drainage courses is prohibited.
- 10. Discharge of waste classified as "hazardous" as defined in Sections 2521(a) of Title 23, CCR, Section 2510, et seq., or "designated", as defined in Section 13173 of the California Water Code, is prohibited.

#### B. Effluent Limitations-Discharge to Big Grizzly Creek

1. The effluent discharge shall not exceed the following limitations during discharge to Big Grizzly Creek:

Constituent	<u>Units</u>	Monthly Average	Weekly <u>Average</u>	Seven Day <u>Median</u>	Daily <u>Maximum</u>	Hourly <u>Average</u>	4-day <u>Average</u>
BOD <sup>1</sup>	mg/L lbs/day <sup>2</sup>	15 10.1	30 20.3		45 30.4		
Total Suspended Solids	mg/L lbs/day <sup>2</sup>	15 10.1	30 20.3		45 30.4		
Chlorine Residual <sup>3</sup>	mg/L					$0.02^{3}$	$0.01^{3}$
Total Coliform Organisms <sup>4</sup>	MPN/ 100mL			2.2	240		
Total Nitrogen	mg/L lbs/day <sup>2</sup>	10 6.8			30 20.3		

<sup>&</sup>lt;sup>1</sup> 5-day, 20°C biochemical oxygen demand

- 2. The arithmetic mean BOD in effluent samples collected over a monthly period shall not exceed 15 percent of the arithmetic mean of the values for influent samples (85 percent removal).
- 3. The discharge shall not have a pH less than 6.0 nor greater than 9.0.
- 4. The 30-day average daily dry weather discharge flow to Big Grizzly Creek shall not exceed 0.081 million gallons.
- 5. Survival of test fishes in 96-hour bioassays of undiluted effluent shall be no less than:

Minimum for any one bioassay - - - - - - 70%

Median for any three or more bioassays - - - - - - - 90%

unless the Discharger submits a report demonstrating that the allowance of an acute toxicity mixing zone is appropriate. If such a demonstration is made, this permit will be reopened and new effluent acute toxicity limitations will be adopted.

#### C. Discharge Specifications (Recycled Water and Discharge to Big Grizzly Creek)

- 1. The Discharger shall cease wastewater pumping and hauling from the Facility, and begin operation of the Facility, no later than the date at which the monthly average dry weather flow to the Facility reaches 6,000 gallons per day.
- 2. Pumping and hauling of wastewater from the Facility shall be performed in a sanitary manner by a licensed hauler. Septage shall be delivered to a regulated facility, such as a

<sup>&</sup>lt;sup>2</sup> Based upon a design treatment capacity of 0.081 mgd.

<sup>&</sup>lt;sup>3</sup> Chlorine residual shall be measured at the chlorine contact chamber effluent prior to dechlorination and after dechlorination. The effluent chlorine limitations refer to the post dechlorination values to be achieved.

<sup>&</sup>lt;sup>4</sup> Samples for total coliform analysis shall be obtained at the chlorine contact chamber effluent during the highest hourly effluent flow.

- septage pond or wastewater treatment plant under regulation by the Regional Board, or similar regulatory body of another state.
- 3. Objectionable odors originating at the Facility shall not be perceivable beyond the Facility property.
- 4. Ponds shall be managed to prevent breeding of mosquitoes. In particular,
  - a. An erosion control program shall assure that small coves and irregularities are not created around the perimeter of the water surface;
  - b. Weeds shall be minimized;
  - c. Dead algae, vegetation, and debris shall not accumulate on the water surface.
- 5. The Discharger shall maintain a minimum two feet of freeboard in the Emergency Pond at all times. Freeboard shall be measured vertically from the lowest elevation of the pond berm to the pond water surface.
- 6. The Emergency Pond shall have sufficient capacity to accommodate allowable wastewater flow and design seasonal precipitation and I/I. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.
- 7. On or about **1 October** of each year, available pond storage capacity shall at least equal the volume necessary to comply with Discharge Specification 5. By **15 October of each year** the Discharger shall submit written confirmation that the ponds have adequate capacity.
- 8. Public contact with wastewater shall be precluded to the best practicable extent possible through such means as fences, signs, and other acceptable alternatives
- 9. The discharge to ponds shall not cause degradation of any water supply.
- 10. Neither the discharge nor its treatment shall create a nuisance as defined in Section 13050 of the California Water Code.

#### **D.** Recycled Water Specifications:

1. The recycled water discharge to the irrigation pumping wet well shall not exceed the following limitations:

Constituent	<u>Units</u>	Monthly <u>Average</u>	Weekly <u>Average</u>	Seven Day <u>Median</u>	Daily <u>Maximum</u>
BOD <sup>1</sup>	mg/L lbs/day <sup>2</sup>	15 10.1	30 20.3		45 30.4

Constituent	<u>Units</u>	Monthly <u>Average</u>	Weekly <u>Average</u>	Seven Day <u>Median</u>	Daily <u>Maximum</u>
Total Suspended Solids	mg/L lbs/day <sup>2</sup>	15 10.1	30 20.3		45 30.4
Total Coliform Organisms <sup>3</sup>	MPN/ 100mL			2.2	240

<sup>&</sup>lt;sup>1</sup> 5-day, 20°C biochemical oxygen demand

In addition to the specified daily maximum total coliform of 240 MPN/100 mL, no more than one sample per month shall exceed 23 MPN/100 mL.

- 2. Dechlorination is not required when wastewater is used for recycling, and there is no maximum chlorine residual requirement. To assure adequate disinfection, the chlorine residual shall be a minimum of 5.0 mg/L measured at the chlorine contact chamber effluent.
- 3. The discharge shall comply with all requirements of Title 22.
- 4. The multi-media filter influent flow shall not exceed an instantaneous application rate of 5 gallons per minute per square foot.
- 5. The storage, delivery, or use of recycled water shall not cause a nuisance or condition of pollution as defined by the California Water Code, Section 13050.
- 6. The discharge of recycled water shall not cause degradation of any water supply.
- 7. The recycled water shall remain within the golf course boundaries.
- 8. Quick couplers on the recycled water piping shall be used that differ from those used on the potable water system. No hose bibs shall be used on the recycled water piping.
- 9. No cross-connections shall exist between recycled water piping and any domestic water supply well, any irrigation well, or potable water lines. Supplementing recycled water with potable water shall not be allowed except through an air-gap separation, or if approved by DHS, a reduced pressure principle backflow device.
- 10. The following setbacks from areas irrigated with recycled water shall be maintained:

<sup>&</sup>lt;sup>2</sup> Based upon a design treatment capacity of 0.081 mgd.

<sup>&</sup>lt;sup>3</sup> Coliform samples shall be obtained during the highest hourly effluent flow.

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GRIZZLY RANCH COMMUNITY SERVICES DISTRICT WASTEWATER COLLECTION, TREATMENT, AND RECYCLING FACILITY PLUMAS COUNTY

<u>Area</u>	Setback Distance (feet)		
Property Line	25		
Public Road	30		
Drainage Course	50		
Irrigation and Domestic Wells	150		

- 11. All areas where recycled water is used that are accessible to the public shall be posted with conspicuous signs, in a size no less than 4 inches high by 8 inches wide, that include the following wording: "RECYCLED WATER- DO NOT DRINK." Each sign shall display the international symbol similar to that shown in Attachment D.
- 12. There shall be at least a 10-foot horizontal and 1-foot vertical separation at crossings between all pipelines transporting recycled water and those transporting domestic supply, with the domestic supply above the recycled water pipeline, unless approved by DHS.
- 13. If an outside laboratory is used for coliform analysis, the Discharger shall arrange to obtain results of coliform testing from the laboratory by telephone as soon as the confirmed test is completed.

#### E. Sludge Disposal

- 1. Collected screenings, sludge, and other solids removed from liquid wastes shall be disposed of in a manner approved by the Executive Officer and consistent with *Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste*, as set forth in Title 27, CCR, Division 2, Subdivision 1, Section 20005, et seq.
- 2. Any proposed change in sludge use or disposal practice from a previously approved practice shall be reported to the Executive Officer and USEPA Regional Administrator at least **90 days** in advance of the change.
- 3. Use and disposal of sewage sludge shall comply with existing federal and state laws and regulations, including permitting requirements and technical standards included in 40 CFR Part 503.
- 4. If the SWRCB and the Regional Boards are given the authority to implement regulations contained in 40 CFR Part 503, this Order may be reopened to incorporate appropriate time schedules and technical standards. The Discharger must comply with the standards and time schedules contained in 40 CFR Part 503 whether or not they have been incorporated into this Order.
- 5. By **30 January of each year**, the Discharger shall submit a sludge disposal plan describing the annual volume of sludge generated by the Facility and specifying their disposal practices (See Monitoring and Reporting Program No. \_\_\_\_\_).

#### F. Receiving Water Limitations

Receiving water limitations are based upon water quality objectives contained in the Basin Plan. As such, they are a required part of this permit.

The discharge shall not cause the following in Big Grizzly Creek or the Middle Fork of the Feather River:

- 1. Electrical conductivity to exceed 150 umhos/cm (Limitation applicable to the Middle Fork of the Feather River only).
- 2. Concentration of dissolved oxygen to fall below 7.0 mg/L. The monthly median of the mean daily dissolved oxygen concentration shall not fall below 85 percent of saturation in the main water mass, and the 95<sup>th</sup> percentile concentration shall not fall below 75 percent of saturation.
- 3. Oils, greases, waxes, or other materials to form a visible film or coating on the water surface or on the stream bottom.
- 4. Oils, greases, waxes, floating material (liquids, solids, foams, and scums), or suspended material to create a nuisance or adversely affect beneficial uses.
- 5. Aesthetically undesirable discoloration.
- 6. Fungi, slimes, or other objectionable growths.
- 7. Turbidity to increase as follows:
  - a. More than 1 Nephelometric Turbidity Units (NTUs) where natural turbidity is between 0 and 5 NTUs.
  - b. More than 20 percent where natural turbidity is between 5 and 50 NTUs.
  - c. More than 10 NTUs where natural turbidity is between 50 and 100 NTUs.
  - d. More than 10 percent where natural turbidity is greater than 100 NTUs.

In determining compliance with the above turbidity limitations, appropriate averaging periods may be applied upon approval by the Executive Officer.

- 8. The normal ambient pH to fall below 6.5, exceed 8.5, or change by more than 0.5 units. In determining compliance with these limitations, appropriate averaging periods may be applied upon approval by the Executive Officer.
- 9. Deposition of material that causes nuisance or adversely affects beneficial uses.
- 10. The normal ambient temperature to be altered by more than 5° F.

- 11. Radionuclides to be present in concentrations that exceed maximum contaminant levels specified in the California Code of Regulations, Title 22; that harm human, plant, animal or aquatic life; or that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.
- 12. Aquatic communities and populations, including vertebrate, invertebrate, and plant species, to be degraded.
- 13. Taste or odor-producing substances to impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, or to cause nuisance or adversely affect beneficial uses.
- 14. The fecal coliform concentration in any 30-day period to exceed a geometric mean of 200 MPN/100 mL or cause more than 10 percent of total samples to exceed 400 MPN/100 mL.
- 15. Toxic pollutants to be present in the water column, sediments, or biota in concentrations that adversely affect beneficial uses; that produce detrimental response in human, plant, animal, or aquatic life; or that bioaccumulate in aquatic resources at levels which are harmful to human health.
- 16. Violations of any applicable water quality standard for receiving waters adopted by the Regional Board or the SWRCB pursuant to the CWA and regulations adopted thereunder.

#### **G.** Groundwater Limitations

- 1. Release of waste constituents from any storage, treatment, or disposal component associated with the Facility shall not, in combination with other sources of waste constituents, cause the following in groundwater:
  - a. Beneficial uses to be adversely impacted or water quality objectives to be exceeded.
  - b. Any increase in total coliform organisms over background shall not exceed 2.2 MPN/100mL.

#### **H.** Pretreatment Program Provisions

1. The Discharger shall implement, as more completely set forth in 40 CFR 403.5, the necessary legal authorities, programs, and controls to ensure that the following incompatible wastes are not introduced to the treatment system where incompatible wastes are:

- a. Wastes which create a fire or explosion hazard in the treatment works;
- b. Wastes which will cause corrosive structural damage to treatment works, but in no case wastes with a pH lower than 5.0, unless the works is specially designed to accommodate such wastes;
- c. Solid or viscous waste in amounts which cause obstruction to flow in sewers, or which cause other interference with proper operation or treatment works;
- d. Any waste, including oxygen demanding pollutants (BOD, etc.), released in such volume or strength as to cause inhibition or disruption in the treatment works, and subsequent treatment process upset and loss of treatment efficiency;
- e. Heat in amounts that inhibit or disrupt biological activity in the treatment works, or that raise influent temperatures above 40°C (104°F), unless the treatment works is designed to accommodate such heat;
- f. Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;
- g. Pollutants which result in the presence of toxic gases, vapors, or fumes within the treatment works in a quantity that may cause acute worker health and safety problems; and
- h. Any trucked or hauled pollutants, except at points predesignated by the Discharger.
- 2. The Discharger shall implement, as more completely set forth in 40 CFR 403.5, the legal authorities, programs, and controls necessary to ensure that indirect discharges do not introduce pollutants into the sewage system that either alone or in conjunction with a discharge or discharges from other sources:
  - a. Flow through the system to the receiving water in quantities or concentrations that cause a violation of this Order, or
  - b. Inhibit or disrupt treatment processes, treatment system operations, or sludge processes, use, or disposal and either cause a violation of this Order or prevent sludge use or disposal in accordance with this Order.
- 3. The Discharger shall notify industrial users, subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N, of their discharge effluent limitations. The limitations must be at least as stringent as the pretreatment standards contained in the applicable federal category. The Discharger may develop more stringent technically based local limitations if it can show cause. The Discharger shall notify the Regional Board if an industrial user violates its discharge effluent limitations to the collection system.

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#### I. General Provisions

- 1. The treatment and disposal facilities shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
- 2. The Discharger shall use the best practicable cost-effective control technique currently available to limit mineralization of Big Grizzly Creek to no more than a reasonable increment.
- 3. The Discharger shall not allow pollutant free wastewater to be discharged into the collection, treatment, or disposal system in amounts that significantly diminish the system's capability to comply with this Order. Pollutant-free wastewater means rainfall, groundwater, cooling waters, and condensates that are essentially free of pollutants.
- 4. The Discharger shall conduct the chronic toxicity testing specified in Monitoring and Reporting Program No. \_\_\_\_\_\_. If the testing indicates that the discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above the water quality objective for chronic toxicity, the Discharger shall submit a work plan to conduct a Toxicity Identification Evaluation (TIE) to identify the cause of toxicity. Upon completion of the TIE, the Discharger shall submit a workplan to conduct a Toxicity Reduction Evaluation (TRE) and, after Regional Board evaluation, conduct the TRE. This Order will be reopened and a chronic toxicity limitation included and/or a limitation for the specific toxicant identified in the TRE included. Additionally, if a chronic toxicity water quality objective is adopted by the State Water Resources Control Board, this Order may be reopened and a limitation based on that objective included.
- 5. When requested by USEPA, the Discharger shall complete and submit Discharge Monitoring Reports to that agency. The submittal date shall be no later than the submittal date specified in the Monitoring and Reporting Program for Discharger Self-Monitoring Reports.
- 6. The Discharger shall provide certified wastewater treatment plant operators in accordance with regulations adopted by the SWRCB.
- 7. The Discharger shall comply with the attached Monitoring and Reporting Program No. \_\_\_\_\_, which is a part of this Order, and any revisions thereto as ordered by the Executive Officer.
- 8. Exceptions to Prohibitions A.3 and A.4 may be granted by the Executive Office provided all of the following conditions are satisfied:

- a. The discharge is necessary due to circumstances that could not have reasonably been foreseen, such as an extended drought. Lack of proper maintenance leading to process upsets is not a valid reason for a request to discharge;
- b. The Discharger demonstrates that the potential impacts of non-discharge would be greater than discharge, including any potential property damage, or interference with the wastewater treatment process. Impact of non-discharge to be analyzed must include as a minimum, damage to treatment processes or structures, and potential damage to nearby property, e.g. should a breach in any pond structure occur;
- c. The Discharger has previously taken all reasonable steps to prevent the discharge and all required maintenance has been performed in accordance with the manufacturer's recommendations and the Facility Operations and Maintenance Manual. Proof that all reasonable steps have been taken to prevent the discharge shall include a schedule for operation of the Irrigation and Emergency Ponds that has been accepted by Regional Board staff;
- d. The Discharger has established appropriate flow minimization programs and toxicity reduction programs. These programs shall include, as a minimum, a public education program for water conservation and a public education program regarding appropriate use and disposal of household, garden, and spa/pool chemicals;
- e. The discharge will not result in the exceedance of any water quality objective in Big Grizzly Creek;
- f. The Discharger agrees to post the outfall and downstream areas with appropriate signs warning against swimming, if the dilution of wastewater in Big Grizzly Creek is less than 50:1.

All of the above programs, reports, and schedules shall be reviewed and accepted by Regional Board staff prior to consideration of discharge during the recreational season. Approval for discharge during 16 May to 15 November time frame, if allowed, must be obtained in writing from the Regional Board Executive Officer.

#### 9. Within **60 days of the adoption of this Order**, the Discharger shall provide in writing:

- a. A copy of the agreement between the GRCSD and the golf course owner that allows for the use of the recycled water for irrigation of the golf course. One year prior to the expiration date of the agreement, the Discharger shall report to the Regional Board on their plans for agreement renewal, or plans for alternative use of the recycle water during the discharge prohibition season (16 May to 15 November).
- b. A complete report, including biddable plans and specifications, to illustrate compliance with all requirements of Title 22, as well as certification that the DHS Division of Drinking Water is satisfied the Title 22 Engineering Report.

- c. A notification plan for the recycled water user(s), the Regional Board, state and local health departments, and other agencies as appropriate, of any treatment failures that could result in the delivery of inadequately treated recycled water to the use area.
- d. A discussion on methods of protection of the domestic water system from recycled water in accordance with the regulations relating to cross-connections and the California Waterworks Standards.
- e. A proposed recycled water use area inspection program, including suggested tasks to be performed by Grizzly Creek Golf, LLC. Identify the locations at the use area where problems are most likely to occur, such as ponding, runoff, overspray, crossconnections, etc., and the personnel in charge of the monitoring and reporting of use area problems.
- f. A description of a training program to educate GRCSD and Grizzly Creek Golf, LLC employees about the recycled water treatment process, and the procedures necessary to avoid violation of waste discharge requirements, as well as the frequency of the training and the entity that will provide it. Also describe the training to assure that GRCSD and Grizzly Creek Golf, LLC employees are aware of the safety precautions to be taken when working with recycled water.
- g. An inspection schedule for the construction of the Facility, describing all stages of construction requiring inspection. The schedule shall include, but not be limited to the following items:
  - i. Preliminary grading for Facility
  - ii. Pouring of concrete
  - iii. Compaction (including compaction testing) of any fill near any structure;
  - iv. Leak testing of all piping, including sewer piping;
  - v. Operation of all pumps, motors, blowers, and valves;
  - vi. Placement of all trench bedding and backfill;
  - vii. Testing of control panel and control system including pump on/off, float levels, float actuation, alarm activation, etc;
  - viii. An installation and Quality Assurance/Quality Control Plan for pond liners, including liner sub base preparation requirements.
  - h. A report providing hydraulic calculations for the outfall diffuser that discusses the mixing that will be achieved in the creek at the diffuser.
- 10. Ninety days prior to the discharge of wastewater to the Facility, the Discharger shall submit:
  - a. An operation and maintenance (O&M) manual for the Facility, including the golf course recycled water system. Regional Board staff must accept the manual before

this task is deemed complete. The O&M manual shall instruct personnel on the operation of the Facility, and the procedures to make field adjustments, as necessary, to preclude nuisance conditions or violations of the waste discharge requirements. The O&M manual shall include a site plan with description of the treatment components, including operating procedures for each component and a troubleshooting flowchart, and a description of alarm response and notification requirements. The O&M manual shall also include a discussion of maintenance and inspection procedures, with maintenance frequency of all equipment, and sample maintenance forms or checklists. The O&M manual shall include the following documents as report appendices:

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- 1) Individual grinder pump and pump vault inspection plan which describes the procedures for testing to determine if the storage and pumping system is working properly. The plan shall include a description of the alarms for these systems. The alarms must be tied into the control panel at the Facility main control room. A separate Operations and Maintenance manual for this system shall be prepared and distributed to homeowners. This manual shall describe the pump vault system and procedures the homeowner must take during power outages to prevent overfilling of the sump and potential overflow or sewage backup into the home.
- 2) Catalog cuts of each piece of equipment.
- 3) A process and instrumentation diagram (PID).
- 4) A schematic process diagram (this may be combined with the PID).
- 5) Maintenance and calibration schedules for each component of the system.
- 6) A list of emergency contacts to be notified in the event of a treatment system failure.
- 7) A plan to assure that recycled water discharged to the irrigation wet well meets the requirements of Title 22 at all times. The Plan must address the requirement for by-pass of the effluent to Emergency Pond during the following conditions:
  - i. Any time the effluent turbidity exceeds 2 NTUs;
  - ii. Anytime the influent turbidity exceeds 10 NTUs.
  - iii. Automatic activation of coagulation if the wastewater turbidity to the filters exceeds 5 NTUs for more than 15 minutes.
  - iv. Anytime flow to the chlorination system or filters exceeds the maximum values allowed by Title 22.
  - v. Anytime the effluent chlorine residual drops below 5 mg/L.

This plan must also discuss the process for returning diverted wastewater back to the Facility to avoid violation of waste discharge requirements.

- 8) A plan to exercise the treatment plant equipment between the time the equipment is installed and its use when Facility flow reaches 6,000 gallons per day.
- 9) An inspection plan for the Emergency Pond liner.
- b. An I/I investigation and management plan.
- c. A Sanitary Sewer System Operation, Maintenance, Overflow Prevention, and Overflow Response Plan (SSS Plan) that describes the actions designed to prevent or minimize the potential for sanitary sewer overflows. The Discharger shall amend the SSS Plan as necessary. The Discharger shall ensure that the up-to-date SSS Plan is readily available to maintenance personnel at all times and that personnel are familiar with the plan.
  - 1). At a minimum, the Operation and Maintenance portion of the SSS Plan shall contain or describe the following:
    - i. Plans of the sewer system, identifying sewer mains, manholes, cleanouts, any air relief or vacuum valves, and any other specific critical equipment or infrastructure;
    - A listing of equipment and elements to be inspected, a description of inspection procedures and inspection frequency, and sample inspection forms;
    - iii. A schedule for routine inspection and testing of manholes, sewer system piping, valves, and other key system components, and rehabilitation procedures to be followed in the case such rehabilitation is necessary;
    - iv. The contingency plan required by § 60323(c) of Title 22;
    - v. The operational and maintenance information required in the "Guidelines for the Preparation of an Engineering Report for the Production, Distribution and Use of Recycled Water," (DHS, March 2001) in sections 4.1, 4.8, and 4.9.
  - 2). At a minimum, the Overflow Prevention and Response portion of the SSS Plan shall contain or describe the following:
    - i. Response procedures for sanitary sewer overflows. Procedures shall minimize the volume of sewage that may enter surface waters, and minimize the adverse effects of sewer overflows on water quality and public health. Procedures shall also ensure that all overflows are properly identified, responded to and reported; and

- ii. A plan to notify the Plumas County Environmental Health Department and a public notification plan, in which any posting of areas contaminated with sewage is performed at the direction of the Plumas County Environmental Health Department. All parties with a reasonable potential for exposure to an overflow event shall be notified. Any spill in excess of 1,000 (one thousand) gallons to a surface water must also be immediately reported to the State of California Office of Emergency Services. Failure to report such a spill in accordance with the above laws and regulations is a misdemeanor punishable by fine and imprisonment.
- d. Engineer stamped as-built drawings.
- e. An engineer's report documenting that the construction of the Facility, recycling areas, outfall, and all items auxiliary to the Facility have been constructed in substantial conformance with the plans and specifications. The report shall include:
  - 1). All leak testing information, including testing on all piping and tanks,
  - 2). An inspection log verifying an inspector was present for all critical phases of construction,
  - 3). Logs of pump testing, filter testing, blower testing, and testing of any other mechanical and/or electrical equipment,
  - 4). Certification that all construction complies with County Codes.
- f. A Plan for testing and/or inspection of the liner of the Emergency Pond to assure that it is free of damage that could cause leakage.
- g. A plan for Facility influent flow reduction and toxicity minimization if the Discharger desires to take advantage of the ability to discharge to Big Grizzly Creek during Facility emergencies occurring during a discharge prohibition period.
- h. A coliform testing plan demonstrating that recycled water not complying with the effluent coliform criteria in this Order will not be used for spray irrigation of the golf course or any area requiring recycled water meeting those same specifications.
- i. A Plan for placement of signs at the golf course and any other areas used for irrigation by recycled water. The signs shall comply with Title 22, and the Discharger shall provide an approval letter for these signs from DHS.
- j. With the aid of DWR, install a continuous recording gauging station at the location of the effluent outfall for Big Grizzly Creek flow measurement. The signal from this gauging station shall be routed to the Facility control building and recorded on a strip chart recorded or other form of hard copy record.

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k. A proposed management plan for application of fertilizer, pesticides, herbicides, and any other chemicals applied to the golf course to minimize toxicity in rainfall or recycled water runoff.

- A tracer study, or other method of testing or analysis, demonstrating that the modal contact time of the chlorine contact chamber is a minimum of 90 minutes at the estimated peak hourly wastewater flow.
- 11. 30 days prior to any discharge of wastewater to the Facility, the Discharger shall provide the name and grade of the primary wastewater treatment plant operator. Fifteen days prior to any change in the Operations and Maintenance Manual (O&M Manual) or primary Facility operator, the Discharger shall notify the Regional Board. The Discharger shall certify that the new operator is familiar with the O&M Manual and this Order within **fifteen days** of the change of primary Facility operator.
- 12. Within one year of the initial discharge from the Facility, the Discharger shall use the data collected in accordance with Monitoring and Reporting Program No. dilution information required in Provision I.10, to determine if the discharge of any priority pollutant has a reasonable potential to cause toxicity to aquatic organisms in the receiving water, or otherwise cause exceedance of any water quality objective. If reasonable potential is determined for ammonia or TDS, this Order will be reopened and effluent limitations adopted.
- 13. Within 180 days of receipt of the third effluent sample analyzed for priority pollutants (see Monitoring and Reporting Program No. ), the Discharger shall submit a report detailing whether any priority pollutant has a reasonable potential to cause or contribute to an in-stream excursion above a water quality standard, including Basin Plan numeric and narrative objectives or NTR and CTR criteria. If reasonable potential is determined for any additional pollutant, the Regional Board will reopen this Order and include effluent limitations for those pollutants.
- 14. If the minimum flow of 4.5 cfs at the point of effluent discharge to Big Grizzly Creek cannot be maintained, because of drought, policy or operational changes by DWR and DFG, or other reasons, the Discharger shall submit a plan for reducing the volume of discharge to Big Grizzly Creek within 180 days of receipt of information regarding potential flow reduction, and reducing the potential impact of such discharges. Avenues to be examined in fulfillment of this requirement shall include, as a minimum, water conservation, extended periods of discharge to the golf course, additional storage such as ponds, and examination of potential areas for on-site disposal.
- 15. The Discharger shall report to the Regional Board within 15 days any toxic chemical release data it reports to the State Emergency Response Commission pursuant to Section 313 of the "Emergency Planning and Community Right to Know Act of 1986."
- 16. In accordance with §60329(a) of Title 22, operating records of the water recycling facilities shall be maintained at the Facility or a central depository within the operating agency.

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- These shall include: all analyses specified in the recycled water criteria; records of operational problems, Facility and equipment breakdowns, and diversions to emergency storage or disposal; and all corrective or preventive action taken.
- 17. In accordance with §60329(d) of Title 22, any discharge of untreated or partially treated wastewater to the use area, and the cessation of same, shall be reported immediately by telephone to the regulatory agency, DHS, and the local health officer.
- 18. The Discharger shall comply with all the items of the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements (NPDES)," dated February 2004, which are a part of this Order. This attachment and its individual paragraphs are referred to as "Standard Provision(s)."
- 19. The Discharger may be required to submit technical reports as directed by the Executive Officer.
- 20. This Order expires on \_\_\_\_\_\_, and the Discharger must file a ROWD in accordance with Title 23, CCR, not later than **180 days in advance of such date** as application for issuance of new waste discharge requirements.
- 21. Prior to making any change in the discharge point, place of use, or purpose of use of the effluent the Discharger shall obtain approval of, or clearance from, the SWRCB, Division of Water Rights.
- 22. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to this office.
- 23. To assume operation under this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. The request must contain the requesting entity's full legal name; the state of incorporation, if a corporation; the address and telephone number of the persons responsible for contact with the Regional Board; and a statement. The statement shall comply with the signatory paragraph of Standard Provision D.6 and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the California Water Code. Transfer shall be approved or disapproved in writing by the Executive Officer.

I, THOMAS R. PINKOS, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on \_\_\_\_\_2005.

THOMAS R. PINKOS

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**Executive Officer** 

RSD: sae 10/17/05